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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/779,706 | 02/18/2004 | Kiyoaki Murai | 118397 | 8966 |

25944 7590 10/01/2007
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| EXAMINER |
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PHILIPPE, GIMS S

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| ART UNIT | PAPER NUMBER |
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2621

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| MAIL DATE | DELIVERY MODE |
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10/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/779,706

Applicant(s)

MURAI ET AL.

Examiner

Gims S. Philippe

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :2/118/04, 8/13/04, 8/8/05, 7/21/06.

DETAILED ACTION

This is a first office action in response to application no. 10/779,706 filed on February 18, 2006 in which claims 1-10 are presented for examination.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

2. Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claim 10 defines a processing program embodying functional descriptive material.

However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed processing program can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163

Art Unit: 2621

USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness- type double patenting as being unpatentable over claims 1-7 of U.S.

Patent application no. 10/779,757.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of claims 1-10 of the present application are included in the claims 1-7 of the cited Patent application.

Therefore, it is considered obvious that one skilled in the art at the time of the invention having US Patent application no. 10/779,757 before him/her would have had no difficulty to modify the conditions and the claim language set in claims 1-7 of the cited US Patent in order to derive the limitations of claims 1-10 of the present application for the same purpose of preventing fluctuation of the corrected images as taught by Murai et al.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 2621

NOTE: The applicant is urged to review the claims of all co-pending applications in order to avoid the delay that a terminal disclaimer approval may cause.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-4, and 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Aihara (US Patent no. 7,113,649).

Regarding claims 1, 8 and 10 Aihara discloses in fig. 3 a statistical value-calculating

Art Unit: 2621

device (See fig. 3, item 201) that performs statistical processing on the image data to generate statistical value data representing statistical values (See col. 4 lines 26-32, generates histogram (statistical value) on the image data); a scene-detecting device (201) that generates a control signal in accordance with a degree of change in a scene based on the image data (note col. 4 lines 37-46, scene judgment device in accordance with contrast or exposure in scene based on image makes a selection examiner relates to a signal); a correction parameter calculating device (See fig. 3, item 203) that weights statistical value data of a plurality of frames based on the control signal to calculate a correction parameter (See col. 5 lines 5-16, parameter calculated based on scene detection step 202 of fig. 3); and an image-correcting device (fig. 3, item 52) that performs image correction processing on the image data (See col. 6 lines 58-59) based on the correction parameter (See items 203, 205 and 206 of fig. 3, correction is based on contrast correction, gray level transformation and correction parameters).

Regarding claims 2 and 9, Aihara further discloses parameter calculating device (203) generating the correction parameter (See col. 5 lines 8-9) by performing calculations in which the weighting on statistical value data of a previous frame is small when the degree of change in the scene represented by the control signal is large (See col. 5 lines 9-15).

Regarding claim 7, Aihara further discloses parameter calculating device detecting a

frame rate of the image data and weighting the statistical value data of the plurality of frames based on the detected frame rate and the control signal (See col. 5 lines 5-15).

As per claims 3, Aihara further discloses an image processing device wherein, when it is detected by the scene detecting device that no change occurs in the scene, the correction parameter calculating device calculates an average of statistical value data of the plurality of frames to generate the correction parameter (See col. 5, lines 22-44).

As per claim 4, Aihara further discloses an image processing device according to Claim 3, wherein, when it is detected by the scene detecting device that a change occurs in the scene, the correction parameter calculating device generates statistical value data of the current frame as the correction parameter (See fig. 4, steps 14-16).

6. Claims 1-4, and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Boice et al. (US Patent no. 5,978,029).

As per claims 1, 8 and 10, Boice discloses an image processing device for performing image processing on image data, the image processing device comprising a statistical value calculating device that performs statistical processing on the image data to generate statistical value data representing statistical values (See fig. 9, item 600, col. 12, lines 57-60), a scene detecting device that detects whether a change occurs in a scene based on the image data (See fig. 9, item 610, col. 12, lines 62-65), a correction

Art Unit: 2621

parameter calculating device that weights the statistical value data of a plurality of frames in accordance with the detection result by the scene detecting device to calculate a correction parameter (See fig. 9, item 620, col. 12, lines 65-67, col. 13, line 1), and an image correcting device that performs image correction processing on the image data based on the correction parameter (See col. 14, lines 1-4).

Regarding claims 2 and 9, Boice further discloses parameter calculating device (203) generating the correction parameter by performing calculations in which the weighting on statistical value data of a previous frame is small when the degree of change in the scene represented by the control signal is large (See fig. 9, item 620, and col. 13, lines 14-24).

Regarding claim 7, Boice further discloses parameter calculating device detecting a frame rate of the image data and weighting the statistical value data of the plurality of frames based on the detected frame rate and the control signal (See col. 14, lines 25-45).

As per claim 3, Boice further discloses an image processing device wherein, when it is detected by the scene detecting device that no change occurs in the scene, the correction parameter calculating device calculates an average of statistical value data of the plurality of frames to generate the correction parameter (See col. 13, lines 29-38, col. 14, lines 1-14).

As per claim 4, Boice further discloses an image processing device according to Claim 3, wherein, when it is detected by the scene detecting device that a change occurs in the scene, the correction parameter calculating device generates statistical value data of the current frame as the correction parameter (See col. 13, lines 49-67).

7. Claims 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pokrinchak et al. (US Patent no. 6252905) teaches real-time evaluation of compressed picture quality within a digital video encoder.

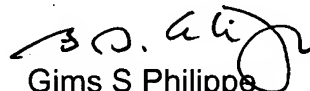
Sethuraman et al. (US Patent no. 6434196) teaches method and apparatus for encoding video information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S. Philippe whose telephone number is (571) 272-7336. The examiner can normally be reached on M-F (10:30-7:00).

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dastouri Mehrdad can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Gims S Philippe
Primary Examiner
Art Unit 2621

GSP

September 26, 2007